

R156. Commerce, Occupational and Professional Licensing.

R156-22. Professional Engineers and Professional Land Surveyors Licensing Act Rules.

R156-22-101. Title.

These rules are known as the "Professional Engineers and Professional Land Surveyors Licensing Act Rules".

R156-22-102. Definitions.

In addition to the definitions in Title 58, Chapters 1 and 22, as used in Title 58, Chapters 1 and 22, or these rules:

(1) "Complete and final" as used in Section 58-22-603 means "complete construction plans" as defined in Subsection 58-22-102(3).

(2) "Direct supervision" as used in Subsection 58-22-102(10) means "supervision" as defined in Subsection 58-22-102(16).

(3) "Employee, subordinate, associate, or drafter of a licensee" as used in Subsections 58-22-102(16), 58-22-603(1)(b) and these rules means one or more individuals not licensed under this chapter, who are working for, with, or providing professional engineering, professional structural engineering, or professional land surveying services directly to and under the supervision of a person licensed under this chapter.

(4) "Engineering surveys" as used in Subsection 58-22-102(9) include all survey activities required to support the sound conception, planning, design, construction, maintenance, and operation of engineered projects, but exclude the surveying of real property for the establishment of land boundaries, rights-of-way, easements, alignment of streets, and the dependent or independent surveys or resurveys of the public land survey system.

(5) "Recognized jurisdiction" as used in Subsection 58-22-302(4)(d)(i), for licensure by endorsement, means any state, district or territory of the United States, or any foreign country who issues licenses for professional engineers, professional structural engineers, or professional land surveyors, and whose licensure requirements include:

(a) Professional Engineer.

(i) a bachelors or post graduate degree in engineering or equivalent education as determined by the Engineering Credentials Evaluation International and four years of full time engineering experience under supervision of one or more licensed engineers; or eight years of full time engineering experience under supervision of one or more licensed professional engineers; and

(ii) passing the NCEES Principles and Practice of Engineering Examination (PE) or passing a professional engineering examination that is substantially equivalent to the NCEES Principles and Practice of Engineering Examination.

(b) Professional Structural Engineer.

(i) a bachelors or post graduate degree in engineering or equivalent education as determined by the Engineering Credentials Evaluation International (ECEI) and four years of full time engineering experience under supervision of one or more licensed engineers; or eight years of full time engineering experience under supervision of one or more licensed professional engineers;

(ii) passing the NCEES Structural I and II Examination; and

(iii) three years of licensed experience in professional structural engineering.

(c) Professional Land Surveyor.

(i) a two or four year degree in land surveying or equivalent education as determined by the Engineering Credentials Evaluation International (ECEI) and four years of full time land surveying experience under supervision of one or more licensed professional land surveyors; or eight years of full time land surveying experience under supervision of one or more licensed professional land surveyors; and

(ii) passing the NCEES Principles and Practice of Land Surveying Examination (PLS) or passing a professional land surveying examination that is substantially equivalent to

(6) "Responsible charge" by a principal as used in Subsections 58-22-102(7) and 58-22-305(7) (a) means that the licensee is assigned to and is personally accountable for the production of specified professional engineering, professional structural engineering or professional land surveying projects within an organization.

(7) "TAC/ABET" means Technology Accreditation Commission/Accreditation Board for Engineering and Technology.

(8) "Under the direction of the licensee" as used in Subsection 58-22-102(16), as part of the definition of "supervision of an employee, subordinate, associate, or drafter of a licensee", means that the unlicensed employee, subordinate, associate, or drafter of a person licensed under this chapter engages in the practice of professional engineering, professional structural engineering, or professional land surveying only on work initiated by a person licensed under this chapter, and only under the administration, charge, control, command, authority, oversight, guidance, jurisdiction, regulation, management, and authorization of a person licensed under this chapter.

(9) "Unprofessional conduct" as defined in Title 58, Chapters 1 and 22, is further defined, in accordance with Subsection 58-1-203(5), in Section R156-22-601.

R156-22-103. Authority - Purpose.

These rules are adopted by the division under the authority of Subsection 58-1-106(1) to enable the division to administer Title 58, Chapter 22.

R156-22-104. Organization - Relationship to Rule R156-1.

The organization of this rule and its relationship to Rule R156-1 is as described in Section R156-1-107.

R156-22-201. Engineering Program Criteria.

In accordance with Subsections 58-22-302(1) (d) and 58-22-302(2) (d), the engineering program criteria is established as one of the following:

(1) The bachelors or post graduate engineering program shall be accredited by EAC/ABET or the Canadian Engineering Accrediting Board (CEAB).

(2) The post graduate engineering degree, when not accredited by EAC/ABET or CEAB, shall be earned from an institution which offers a bachelors or masters degree in an engineering program accredited by EAC/ABET or CEAB in the same specific engineering discipline as the earned post graduate degree.

(3) If the degree was earned in a foreign country, the engineering curriculum shall be determined to be equivalent to a EAC/ABET accredited program by the Engineering Credentials Evaluation International. Only deficiencies in course work in the humanities, social sciences and liberal arts and no more than five semester hours in math, science or engineering, not to exceed a total of 10 semester hours noted by the credentials evaluation may be satisfied by successfully completing the deficiencies in course work at a recognized college or university approved by the division in collaboration with the board. Engineering course work deficiencies must be completed at an EAC/ABET approved program.

R156-22-202. Qualifying Experience for Licensure as a Professional Engineer.

(1) In accordance with Subsection 58-22-302(1) (e), an applicant for licensure as a professional engineer shall comply with one or more of the following qualifying experience requirements:

(a) Submit verification of qualifying experience from one or more licensed professional engineers who have provided supervision or who have personal knowledge of the applicant's knowledge, ability, and competence to practice professional engineering documenting completion of a minimum of four calendar years of qualifying experience in professional engineering approved by the division in collaboration with the board in accordance with the following:

(i) Up to one year of qualifying experience may be obtained while enrolled in an engineering program meeting the criteria set forth in Section R156-22-201 if completed before January 1, 2005.

(ii) Unlimited qualifying experience may be obtained after meeting the education requirements.

(iii) A maximum of three of the four years of qualifying experience may be approved by the board for persons who complete one or more of the following:

(A) A maximum of three years of qualifying experience may be granted for teaching advanced engineering subjects in a college or university offering an engineering curriculum accredited by EAC\ABET.

(B) A maximum of three years of qualifying experience may be granted for conducting research in a college or university offering an engineering curriculum accredited by EAC/ABET.

(C) A maximum of one year of qualifying experience may be granted for completion of a masters degree in engineering provided that both the earned bachelors and masters degree in engineering meet the program criteria set forth in Section R156-22-201.

(D) A maximum of two years of qualifying experience may be granted for completion of a doctorate degree in engineering provided that both the earned bachelors or masters degree and doctorate degree in engineering meet the program criteria set forth in Section R156-22-201; or

(b) Submit documentation of two years of licensed experience in a recognized jurisdiction as a professional engineer.

(2) An applicant who was unsuccessful in obtaining licensure by experience before July 1, 1996, but who passed the NCEES Fundamentals of Engineering Examination and completed four years of qualifying experience before July 1, 1996, and who thereafter completes the education requirements in Section R156-22-201, may receive credit for the qualifying experience obtained before July 1, 1996 regardless of the requirements of Subsection (1).

(3) The performance or supervision of construction work as a contractor, foreman or superintendent is not qualifying experience for licensure as a professional engineer.

(4) Full or part time employment, research, or teaching for periods of time less than ten weeks in length will not be considered as qualifying experience.

R156-22-203. Experience Requirements for Licensure as a Professional Structural Engineer.

(1) In accordance with Subsection 58-22-302(2)(e), each applicant shall submit verification of professional structural engineering experience from one or more licensed professional engineers or professional structural engineers who have personal knowledge of the applicant's knowledge, ability and competence to practice professional structural engineering, which experience is in addition to the qualifying experience required for licensure as a professional engineer.

(2) Professional structural engineering experience shall include responsible charge of structural design in one or more of the following areas:

(a) structural design of any building or structure two stories and more, or 45 feet in height, designed in Uniform Building Code (UBC) seismic zones 2, 3, or 4;

(b) structural design for a major seismic retrofit/rehabilitation of an existing building or structure in UBC seismic zones 2, 3, or 4; or

(c) structural design of any other structure of comparable structural complexity.

(3) Professional structural engineering experience shall include structural design in all of the following areas:

(a) use of three of the following four materials as they relate to the design, rehabilitation or investigation of buildings or structures:

(i) steel;

(ii) concrete;

(iii) wood; or

- (iv) masonry;
- (b) selection of framing systems including the consideration of alternatives and the selection of an appropriate system for the interaction of structural components to support vertical and lateral loads;
- (c) selection of foundation systems including the consideration of alternatives and the selection of an appropriate type of foundation system to support the structure;
- (d) design and detailing for the transfer of forces between stories in multi-story buildings or structures;
- (e) application of lateral design in the design of the buildings or structures in addition to any wind design requirements; and
- (f) application of the local, state and federal code requirements as they relate to design loads, materials, and detailing.

R156-22-204. Examination Requirements for Licensure as a Professional Engineer.

- (1) In accordance with Subsection 58-22-302(1)(f), the examination requirements for licensure as a professional engineer are defined, clarified or established as the following:
 - (a) the NCEES Fundamentals of Engineering (FE) Examination with a passing score as established by the NCEES;
 - (b) a NCEES Principles and Practice of Engineering (PE) Examination other than Structural II with a passing score as established by the NCEES; and
 - (c) as part of the application for license, pass all questions on the open book, take home Utah Law and Rules Examination.
- (2) An applicant must have successfully completed the qualifying experience requirements set forth in Section R156-22-202, and have successfully completed the education requirements set forth in Section R156-22-201, and make application before being eligible to sit for the NCEES PE examination.
- (3) Candidates with three or more unsuccessful attempts on an NCEES examination, regardless of where taken, must submit a new application to the Division to be re-qualified for future administrations of the same examination. If re-qualified by the Division, applicants must wait 12 months before being reseated for the next scheduled examination. At the end of the 12-month period, the applicant may take the exam no more than once every calendar year.
- (4) The admission criteria to sit for the NCEES FE examination is set forth in Section 58-22-306.

R156-22-205. Examination Requirements for Licensure as a Professional Structural Engineer.

- (1) In accordance with Subsection 58-22-302(2)(f), the examination requirements for licensure as a professional structural engineer are defined, clarified, or established as the following:
 - (a) the NCEES Fundamentals of Engineering Examination (FE) with a passing score as established by the NCEES;
 - (b) one of the following professional examinations:
 - (i) the NCEES Structural I and Structural II Examinations with a passing score as established by the NCEES; or
 - (ii) prior to July 1, 2004, the 16 hour California Structural Examination with a passing score as established by the California Engineering Board; however, after July 1, 2004, this exam will not be accepted; and
 - (c) as part of the application for license, pass all questions on the open book, take home Utah Law and Rules Examination.
- (2) An applicant must have successfully completed the experience requirements set forth in Subsection R156-22-203(2) and make application before being eligible to sit for the NCEES Structural Examination(s).

(3) Candidates with three or more unsuccessful attempts on an NCEES examination, regardless of where taken, must submit a new application to the Division to be re-qualified for future administrations of the same examination. If re-qualified by the Division, applicants must wait 12 months before being reseated for the next scheduled examination. At the end of the 12-month period, the applicant may take the exam no more than once every calendar year.

R156-22-301. Equivalent Land Surveying Program for Licensure as a Professional Land Surveyor.

In accordance with Subsection 58-22-302(3)(d), an equivalent land surveying program for licensure as a professional land surveyor is defined as an earned bachelors or masters degree from a curriculum related to land surveying and completion of a minimum of 22 semester hours or 32 quarter hours of course work in land surveying which shall include the following courses:

(a) successful completion of a minimum of one course in each of the following content areas:

- (i) boundary law;
- (ii) writing legal descriptions;
- (iii) public land survey system;
- (iv) surveying field techniques; and

(b) the remainder of the 22 semester hours or 32 quarter hours may be made up of successful completion of courses from the following content areas:

- (i) photogrammetry;
- (ii) studies in land records or land record systems;
- (iii) survey instrumentation;
- (iv) global positioning systems;
- (v) geodesy;
- (vi) control systems;
- (vii) land development;
- (viii) drafting, not to exceed six semester hours or eight quarter hours; and
- (ix) algebra, geometry, trigonometry, not to exceed six semester hours or eight quarter hours.

R156-22-302. Qualifying Experience for Licensure as a Professional Land Surveyor.

(1) In accordance with Subsections 58-22-302(3)(d), an applicant for licensure as a professional land surveyor shall comply with one or more of the following qualifying experience requirements:

(a) Submit verification of qualifying experience from one or more licensed professional land surveyors who have provided supervision or who have personal knowledge of the applicant's knowledge, ability, field experience and competence to practice professional land surveying in accordance with the following:

(i) Applicants who have met the education requirements in Subsection 58-22-302(3)(d)(i) shall document four years of qualifying experience in land surveying which experience may be obtained before, during or after completing the education requirements for licensure.

(ii) Applicants who did not complete the education requirements in Subsection 58-22-302(3)(d)(i) shall document eight years of qualifying experience in land surveying prior to January 1, 2007; or

(b) Submit documentation of two years of licensed experience in a recognized jurisdiction as a professional land surveyor.

(2) The four years of qualifying experience required in R156-22-302(1)(a)(i) and four of the eight years required in R156-22-302(1)(a)(ii) shall comply with the following:

(a) Two years of experience should be specific to field surveying with actual

"hands on" surveying, including all of the following:

- (i) operation of various instrumentation;
 - (ii) review and understanding of plan and plat data;
 - (iii) public land survey systems;
 - (iv) calculations;
 - (v) traverse;
 - (vi) staking procedures;
 - (vii) field notes and manipulation of various forms of data encountered in horizontal and vertical studies; and
- (b) Two years of experience should be specific to office surveying, including all of the following:
- (i) drafting (includes computer plots and layout);
 - (ii) reduction of notes and field survey data;
 - (iii) research of public records;
 - (iv) preparation and evaluation of legal descriptions; and
 - (v) preparation of survey related drawings, plats and record of survey maps.
- (3) The remaining four years or two years of qualifying experience required in R156-22-302(1) (a) (ii) shall include any aspects of the practice of land surveying under the supervision of a licensed professional land surveyor in accordance with Subsection 58-22-102(16).
- (4) Full or part time employment for periods of time less than ten weeks in length will not be considered as qualifying experience.

R156-22-303. Examination Requirements for Licensure as a Professional Land Surveyor.

- (1) In accordance with Subsection 58-22-302(3) (g), the examination requirements for licensure as a professional land surveyor are established as the following:
- (a) the NCEES Fundamentals of Land Surveying (FLS) Examination with a passing score as established by the NCEES;
 - (b) the NCEES Principles and Practice of Land Surveying (PLS) Examination with a passing score as established by the NCEES; and
 - (c) the Utah Local Practice Examination with a passing score of at least 75.
- (2) An applicant must have successfully completed the qualifying experience requirements set forth in Subsections R156-22-301 and 302 and make application before being eligible to sit for the NCEES PLS examination.
- (3) Candidates with three or more unsuccessful attempts on an NCEES examination, regardless of where taken, must submit a new application to the Division to be re-qualified for future administrations of the same examination. If re-qualified by the Division, applicants must wait 12 months before being reseated for the next scheduled examination. At the end of the 12-month period, the applicant may take the exam no more than once every calendar year.

R156-22-401. Examination Requirements for Licensure by Endorsement.

In accordance with Subsection 58-22-302(4) (d) (ii), the examination requirements for licensure by endorsement are established as follows:

- (1) An applicant for licensure as a professional engineer by endorsement shall comply with the examination requirements in Section R156-22-204 except that the board may waive one or more of the following examinations under the following conditions:
- (a) the NCEES FE Examination for an applicant who is a principal for five of the last seven years preceding the date of the license application and who was not required to pass the NCEES FE Examination for initial licensure from the recognized jurisdiction the applicant was originally licensed;
 - (b) the NCEES PE Examination for an applicant who is a principal for five of the last seven years preceding the date of the license application, who has been licensed for 20 years preceding the date of the license application, and who was not required to pass the NCEES PE Examination for initial licensure from the recognized jurisdiction the

applicant was originally licensed.

(2) An applicant for licensure as a professional structural engineer by endorsement shall comply with the examination requirements in Section R156-22-205 except that the board may waive the NCEES FE Examination for an applicant who is a principal for five of the last seven years preceding the date of the license application and who was not required to pass the NCEES FE Examination for initial licensure from the recognized jurisdiction the applicant was originally licensed.

(3) An applicant for licensure as a professional land surveyor by endorsement shall comply with the examination requirements in Section R156-22-303 except that the board may waive either the NCEES FLS Examination or the NCEES PLS Examination or both to an applicant who is a principal for five of the last seven years preceding the date of the license application and who was not required to pass the NCEES FLS Examination or the PLS Examination for initial licensure from the recognized jurisdiction the applicant was originally licensed.

R156-22-501. Continuing Education for Professional Engineers, Professional Structural Engineers and Professional Land Surveyors.

In accordance with Subsection 58-22-303(2) and Section 58-22-304, the qualifying continuing professional education standards for professional engineers, professional structural engineers and professional land surveyors are established as follows:

(1) During each two year period ending on December 31 of each even numbered year, a licensed professional engineer, professional structural engineer and professional land surveyor shall be required to complete not less than 24 hours of qualified professional education directly related to the licensee's professional practice.

(2) The required number of hours of professional education for an individual who first becomes licensed during the two year period shall be decreased in a pro-rata amount equal to any part of that two year period preceding the date on which that individual first became licensed.

(3) Qualified continuing professional education under this section shall:

(a) have an identifiable clear statement of purpose and defined objective for the educational program directly related to the practice of a professional engineer, professional structural engineer, or professional land surveyor;

(b) be relevant to the licensee's professional practice;

(c) be presented in a competent, well organized and sequential manner consistent with the stated purpose and objective of the program;

(d) be prepared and presented by individuals who are qualified by education, training and experience; and

(e) have associated with it a competent method of registration of individuals who actually completed the professional education program and records of that registration and completion are available for review.

(4) Credit for qualified continuing professional education shall be recognized in accordance with the following:

(a) unlimited hours shall be recognized for professional education completed in blocks of time of not less than one hour in formally established classroom courses, seminars, or conferences;

(b) a maximum of 12 hours per two year period may be recognized for teaching in a college or university or for teaching qualified continuing professional education courses in the field of professional engineering, professional structural engineering or professional land surveying;

(c) a maximum of four hours per two year period may be recognized for preparation of papers, articles, or books directly related to the practice of professional engineering, professional structural engineering or professional land surveying and submitted for publication;

(d) a maximum of six hours per two year period may be recognized for active professional practice of professional engineering, professional structural engineering or

professional land surveying; and

(e) a maximum of six hours per two year period may be recognized for active membership in any state, national or international organization for the development and improvement of the profession of professional engineering, professional structural engineering or professional land surveying.

(5) A licensee shall be responsible for maintaining records of completed qualified continuing professional education for a period of four years after close of the two year period to which the records pertain. It is the responsibility of the licensee to maintain information with respect to qualified continuing professional education to demonstrate it meets the requirements under this section.

(6) If a licensee exceeds the 24 hours of qualified continuing professional education during the two year period, the licensee may carry forward a maximum of 12 hours of qualified continuing professional education into the next two year period.

(7) A licensee who documents they are engaged in full time activities or is subjected to circumstances which prevent that licensee from meeting the continuing professional education requirements established under this section may be excused from the requirement for a period of up to three years. However, it is the responsibility of the licensee to document the reasons and justify why the requirement could not be met.

R156-22-503. Administrative Penalties.

In accordance with Subsections 58-1-501, 58-1-501(1)(a) through (d), 58-22-501 and 58-22-503, unless otherwise ordered by the presiding officer, the following fine schedule shall apply.

(1) Engaging in unlicensed practice or using any title that would cause a reasonable person to believe the user of the title is licensed under this chapter.

First Offense: \$400

Second Offense: \$1,000

(2) Engaging in, or representing oneself as engaged in the practice of professional engineering or land surveying as a corporation, proprietorship, partnership, or limited liability company unless exempted from licensure.

First Offense: \$400

Second Offense: \$1,000

(3) Impersonating another licensee or engaging in practice under this chapter using a false or assumed name, unless permitted by law.

First Offense: \$400

Second Offense \$1,000

(4) Knowingly employing any person to practice under this chapter who is not licensed to do so.

First Offense: \$600

Second Offense: \$1,200

(5) Knowingly permits any person to use his or her license except as permitted by law.

First Offense: \$600

Second Offense: \$1,200

(6) For third and subsequent offenses a fine of up to \$2,000 may be assessed for each day of continued offense as provided in Subsection 58-22-503(1)(i)(iii).

R156-22-601. Unprofessional Conduct.

"Unprofessional conduct" includes:

(1) submitting an incomplete final plan, specification, report or set of construction plans to:

(a) a client, when the licensee represents, or could reasonably expect the client to consider the plan, specification, report or set of construction plans to be complete and final; or

(b) to a building official for the purpose of obtaining a building permit;

(2) failing as a principal to exercise responsible charge;

(3) failing as a supervisor to exercise supervision of an employee, subordinate, associate or drafter; or

(4) failing to conform to the accepted and recognized standards and ethics of the profession including those stated in the "Model Rules of Professional Conduct" of the National Council of Examiners for Engineering and Surveying (NCEES), 1997, which is hereby incorporated by reference.

R156-22-701. Seal Requirements.

(1) In accordance with Section 58-22-601, all final plans, specifications, reports, maps, sketches, surveys, drawings, documents and plats prepared by the licensee or prepared under the supervision of the licensee, shall be sealed in accordance with the following:

(a) Each seal shall be a circular seal, 1-1/2 inches minimum diameter.

(b) Each seal shall include the licensee's name, license number, "State of Utah", and "Professional Engineer", "Licensed Professional Engineer", "Registered Professional Engineer", "Certified Structural Engineer", "Structural Engineer", "Licensed Professional Structural Engineer", "Professional Structural Engineer", "Land Surveyor", "Professional Land Surveyor", "Licensed Professional Land Surveyor" or "Licensed Land Surveyor", as appropriate.

(c) Each seal shall be signed and dated with the signature and date appearing across the face of each seal imprint.

(d) Each original set of final plans, specifications, reports, maps, sketches, surveys, drawings, documents and plats, as a minimum, shall have the original seal imprint, original signature and date placed on the cover or title sheet.

(e) A seal may be a wet stamp, embossed, or electronically produced.

(f) Copies of the original set of plans, specifications, reports, maps, sketches, surveys, drawings, documents and plats which contain the original seal, original signature and date is permitted, if the seal, signature and date is clearly recognizable.

(2) A person who qualifies for and uses the title of professional engineer intern is not permitted to use a seal.

KEY: engineers, surveyors, professional land surveyors, professional engineers

Effective December 17, 2003

Notice of Continuation January 13, 2003

58-22-101

58-1-106(1) (a)

58-1-202(1) (a)

**PROFESSIONAL ENGINEERS AND
PROFESSIONAL LAND SURVEYORS
LICENSING ACT RULES**

**R156-22
Utah Administrative Code
Issued December 17, 2003**